

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P519384

Luminaire Tested: **SQ4-WB-100U-075D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519384
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-075D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

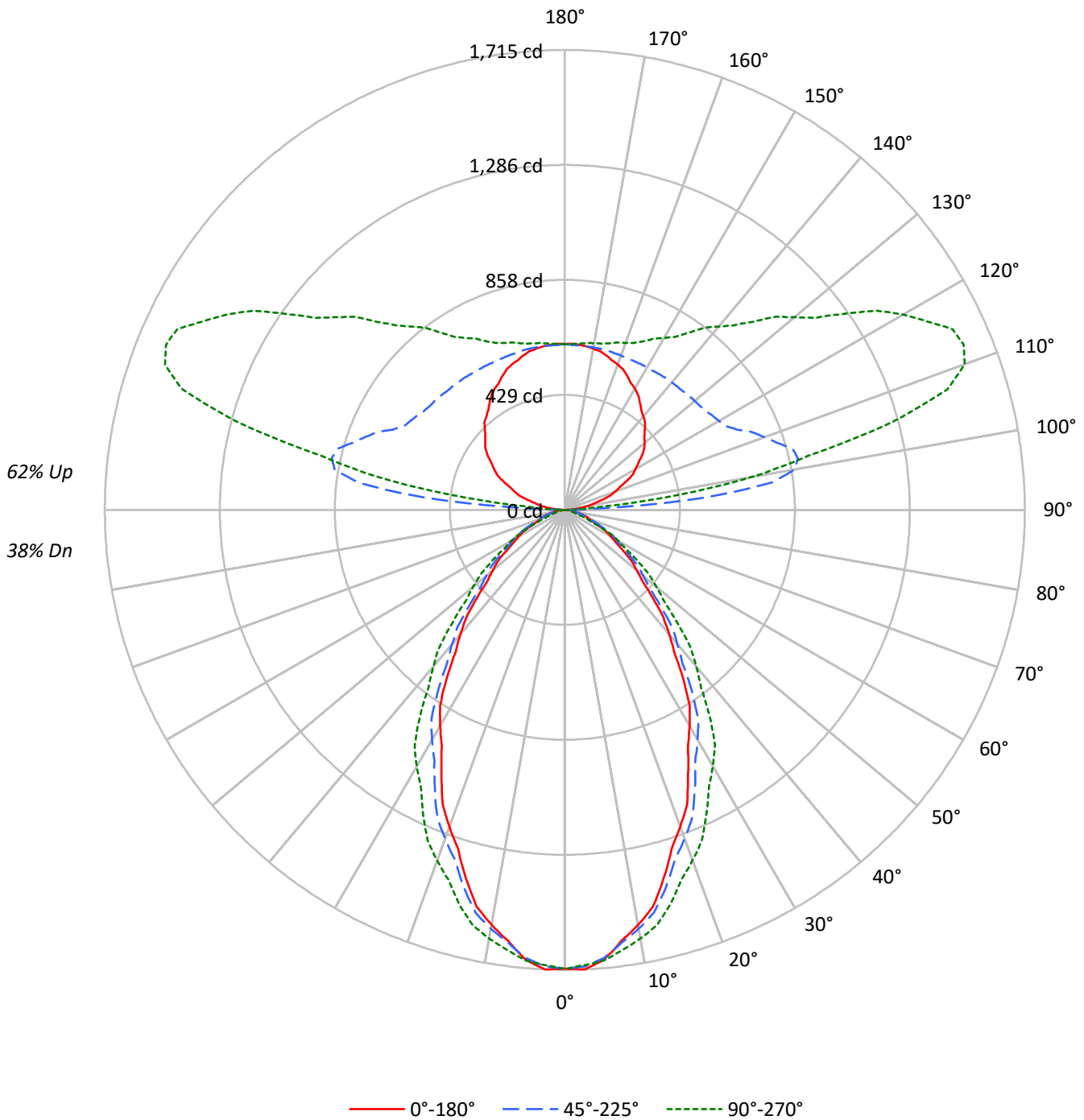
Lumens per Lamp: N/A
Luminaire Lumens: 6511.0 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 49.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15787	15787	15787
5°	15590	15534	15625
10°	14729	14863	15208
15°	13598	13913	14537
20°	12348	12812	13660
25°	11075	11680	12726
30°	9902	10550	11758
35°	8659	9285	10613
40°	7289	7867	9187
45°	6015	6534	7671
50°	5022	5474	6390
55°	4263	4699	5278
60°	3644	4072	4211
65°	2901	3425	2720
70°	2573	2673	1662
75°	2381	2167	1016
80°	2194	1992	877
85°	1990	1831	720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.0	2.4
10°-20°	408.2	6.3
20°-30°	528.8	8.1
30°-40°	517.8	8.0
40°-50°	396.3	6.1
50°-60°	264.1	4.1
60°-70°	144.1	2.2
70°-80°	60.0	0.9
80°-90°	18.3	0.3
90°-100°	289.5	4.4
100°-110°	799.1	12.3
110°-120°	824.2	12.7
120°-130°	662.3	10.2
130°-140°	520.5	8.0
140°-150°	399.2	6.1
150°-160°	286.9	4.4
160°-170°	175.5	2.7
170°-180°	59.2	0.9
0°-30°	1094.0	16.8
0°-40°	1611.8	24.8
0°-60°	2272.2	34.9
0°-90°	2494.7	38.3
90°-120°	1912.8	29.4
90°-150°	3494.8	53.7
90°-180°	4016.0	61.7
0°-180°	6511.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1711	1711	1711	1711	1711	
5°	1683	1666	1677	1681	1687	157
15°	1424	1418	1457	1496	1522	398
25°	1088	1091	1147	1197	1250	500
35°	769	772	824	880	942	478
45°	461	470	501	539	588	360
55°	265	276	292	303	328	240
65°	133	144	157	137	125	138
75°	67	67	61	42	28	71
85°	19	19	17	11	7	20
90°	2	4	8	9	10	4
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	

TEST NUMBER: P519384

CATALOG NUMBER: SQ4-WB-100U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1711.1	1711.1	1711.1	1711.1	1711.1
2.5°	1715.3	1700.0	1703.9	1703.8	1699.1
5°	1683.3	1666.4	1677.3	1681.2	1687.1
7.5°	1620.9	1608.1	1627.9	1642.6	1654.5
10°	1572.2	1561.2	1586.5	1607.9	1623.3
12.5°	1515.8	1506.5	1537.8	1566.5	1586.6
15°	1423.6	1418.4	1456.6	1496.2	1521.9
17.5°	1324.9	1322.4	1366.2	1412.4	1445.3
20°	1257.6	1256.9	1304.9	1353.1	1391.3
22.5°	1189.7	1191.4	1241.9	1291.9	1335.4
25°	1087.9	1090.9	1147.3	1197.3	1250.1
27.5°	993.8	995.1	1053.4	1106.2	1162.6
30°	929.5	933.2	990.3	1045.0	1103.7
32.5°	865.2	869.5	925.5	981.9	1041.8
35°	768.8	772.5	824.4	879.9	942.3
37.5°	669.4	674.4	720.5	772.9	834.3
40°	605.2	612.5	653.2	702.6	762.8
42.5°	543.3	552.4	590.1	637.0	691.4
45°	461.0	469.8	500.8	538.7	587.9
47.5°	390.1	400.3	424.1	456.7	498.7
50°	349.9	359.4	381.4	405.6	445.2
52.5°	314.4	324.0	343.6	362.2	396.0
55°	265.0	276.1	292.1	303.1	328.1
57.5°	224.5	235.1	247.8	252.8	267.9
60°	197.5	209.2	220.7	220.2	228.2
62.5°	172.8	182.8	194.3	186.4	186.8
65°	132.9	143.9	156.9	137.1	124.6
67.5°	107.4	109.7	123.1	95.6	80.8
70°	95.4	95.4	99.1	74.0	61.6
72.5°	83.9	83.9	80.5	60.2	47.2
75°	66.8	66.8	60.8	41.7	28.5
77.5°	51.5	50.9	46.6	31.1	20.7
80°	41.3	41.3	37.5	24.6	16.5
82.5°	32.3	32.3	29.1	19.2	12.3
85°	18.8	18.8	17.3	11.2	6.8
87.5°	7.0	7.4	7.6	5.4	5.0
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4

TEST NUMBER: P519384

CATALOG NUMBER: SQ4-WB-100U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)